



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1521G BYPASS RATIO: 11.4
 UNIQUE ID NUMBER: 16FW112 PRESSURE RATIO (π_{00}): 35.1
 COMBUSTOR: TALON X
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 97.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.4	19.0	35.1	4.0
AS % OF ORIGINAL LIMIT	2.0	16.1	31.8	16.8
AS % OF CAEP/2 LIMIT (NO _x)			39.8	
AS % OF CAEP/4 LIMIT (NO _x)			45.5	
AS % OF CAEP/6 LIMIT (NO _x)			50.8	
AS % OF CAEP/8 LIMIT (NO _x)			58.2	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.690	0.10	0.10	23.20	3.0
CLIMB OUT	85	2.2	0.580	0.10	0.10	18.50	2.6
APPROACH	30	4.0	0.210	0.10	2.10	10.90	2.5
IDLE	7	26.0	0.070	0.10	14.60	5.60	2.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			265	27	1711	3250	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.3	17.6	33.1	3.6
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.2-0.5	17.1-18.1	32-33.9	1.7-4.9

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.2-101.4
TEMPERATURE (K)	259.5-282
ABS HUMIDITY (kg/kg)	0.00081-0.00317

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	16.4-18.1

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: Pratt & Whitney Canada
 TEST LOCATION: Mirabel Aerospace Centre - Quebec
 TEST DATES: 15/01/2016-10/05/2016

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

- Data from Certification Report PWA-10061
- Certification in accordance with Part III, Chapter 2, of Amendment 8 of ICAO Annex 16 Vol. II.
- NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)